TOWN OF BLOOMING GROVE INTRODUCTORY LOCAL LAW

SOLAR ZONING LAW

BE IT ENACTED by the Town Board of the Town of Blooming Grove, Orange County, State of New York, as follows:

<u>Section 1</u>. Chapter 235, titled "Zoning," of the Code of the Town of Blooming Grove, is amended by adding a new Article X, entitled "Solar Energy Systems," to read as follows:

ARTICLE X Solar Energy Systems

§235-46. Legislative intent.

- A. Solar energy is a renewable and non-polluting energy resource that reduces fossil fuel emissions and reduces a municipality's energy load. Energy generated from Solar Energy Systems can be used to offset energy demand on the grid when excess solar power is generated.
- B. The use of Solar Energy Systems for the purpose of providing electricity and energy for heating and/or cooling, or any other use needing electric power is a necessary component of the Town of Blooming Grove's current and long term sustainability agenda.
- C. This local law is intended to permit and regulate Solar Energy Systems and equipment and the provision of adequate sunlight and convenience of access necessary therefor; to balance the potential impact on neighbors when Solar Collectors may be installed near their property, while preserving the rights of property owners to install Solar Energy Systems in accordance with applicable laws and regulations; and to recognize solar energy as a source for current and long term energy sustainability. This local law and the implementation of this local law is intended to accord with the state Agriculture and Markets Law and Guidelines of the State Department of Agriculture and Markets.

§235-47. Definitions.

COLLECTIVE SOLAR SYSTEM – A solar installation owned collectively through condominium or property owners associations, business groups (e.g. strip-mall collective), college student groups, "adopt-a-solar-panel" programs, or other similar arrangements. If the amount of energy produced by such system:

- (1) Does not exceed twelve (12) Kilowatts per hour, it shall be subject to the provisions herein that apply to a Small-Scale Solar Energy System, or
- (2) Exceeds twelve (12) Kilowatts per hour, it shall be subject to the provisions herein that apply to a Large-Scale Solar Energy System.

GROUND-MOUNTED SOLAR ENERGY SYSTEM - A Solar Energy System that is anchored to the ground or attached to a pole or other mounting system, detached from any other structure.

KILOWATT (kW) – A unit of electrical power equal to 1000 Watts, which constitutes the basic unit of electrical demand. A Watt is a metric measurement of power (not energy) and is the rate (not the duration) at which electricity is used. 1000 kW is equal to one (1) megawatt (MW).

KILOWATT-HOUR (kWh) – A unit of energy equivalent to one Kilowatt (1 kW) of power expended for one (1) hour of time.

LARGE-SCALE SOLAR ENERGY SYSTEM - A Solar Energy System that produces over 12 Kilowatts (kW) per hour of energy which primarily serves buildings or structures to which the system is not attached. The maximum amounts of electric generated by the system and the maximum area of land upon which the system shall be erected are as follows:

- (1) Up to one (1) Megawatt per hour on a parcel of land no larger than ten (10) acres, excluding any easement for accessing the parcel; or
- (2) Over one (1) but not to exceed two (2) Megawatt per hour on a parcel of land no larger than twenty (20) acres, excluding any easement for accessing the parcel.

MEGAWATT (MW) – Equal to 1000 Kilowatts; a measure of the use of electrical power.

MEGAWATT-HOUR (MWh) – A unit of energy equivalent to one Megawatt (1MW) of power expended for one (1) hour of time.

SMALL-SCALE SOLAR ENERGY SYSTEM - A Solar Energy System that does not produce more than 12kw per hour of energy, and serves only the buildings or structures on the lot upon which the system is located. Nothing contained in this provision shall be construed to prohibit the sale of excess power through a "net billing" or "net metering" arrangement made in accordance with New York Public Service Law (Section 66-j) or similar state or federal statute.

SOLAR ACCESS - Space open to the sun and substantially clear of overhangs or shade, including the orientation of streets and lots to the sun so as to permit the use of Solar Energy System on individual properties.

SOLAR COLLECTOR - A solar photovoltaic cell, module, panel or array or a solar hot air or water collector device, which relies upon solar radiation as an energy source for the generation of electricity or transfer of stored heat.

SOLAR EASEMENT - An easement recorded pursuant to New York State Real Property Law §335-b, the purpose of which is to secure the right to receive sunlight across real property owned by another entity for the purpose of operating a Solar Energy System.

SOLAR ENERGY SYSTEM - Solar Collectors, controls, energy storage devices, heat pumps, heat exchangers and other materials, hardware or equipment necessary to the process by which solar radiation is collected, converted into another form of energy, stored, protected from unnecessary dissipation and distributed.

SOLAR PANEL - A device for the direct conversion of solar energy into electricity.

QUALIFIED SOLAR INSTALLER - A person who possesses skills and knowledge related to the construction and operation of Solar Energy Systems equipment and installations and has received safety training on the hazards involved. Persons or entities on the list of eligible solar installers maintained by the New York State Energy Research and Development Authority (NYSERDA), or are certified as a solar installer by the North American Board of Certified Energy Practitioners (NABCEP), shall be deemed to be Qualified Solar Installers for the purpose of this definition.

§235-48. Applicability.

- A. The requirements of this local law shall apply to all Solar Energy Systems and equipment, installed or modified after the effective date of this local law.
- B. A Solar Energy System for which a valid permit has been issued and is in compliance with all applicable New York State laws, rules and regulations is not required to comply with this local law, provided that such systems complied with all applicable laws, rules and regulations when installed.
- §235-49. General permit, inspection and operating requirements.
 - A. No Solar Energy System equipment shall be installed, operated or modified except in compliance with this Chapter.
 - B. All Solar Energy System installations must be performed by a Qualified Solar Installer.
 - C. Prior to operation, electrical connections must be inspected by the Town Code Enforcement Officer and by a qualified electrical inspector acceptable to the Town. Any connection to a public utility grid must meet all applicable Town, State, Federal and public utility laws, rules and regulations.
 - D. All Solar Energy Systems shall be maintained to be safe and in good working order.
 - E. All Solar Energy Systems shall comply with all applicable New York Uniform Fire Prevention and Building Code standards.
 - F. If solar storage batteries are included as part of the system, they must be placed in secure containers or enclosures meeting the requirements of the New York State Building Code when in use, and when no longer used, such batteries shall be disposed of in accordance with the laws and regulations of the Town and other applicable laws and regulations.

- G. All Solar Energy Systems and equipment shall be marked in order to provide emergency responders with appropriate warning and guidance with respect to isolating the solar electric system. Materials used for marking shall be weather resistant. The markings shall be placed adjacent to the main service disconnect in a location clearly visible from the location where the lever is operated. If any of the standards for markings in this subsection are more stringent than applicable provisions of the New York State Uniform Fire Prevention and Building Code (the State Code), then these provisions shall be deemed to be guidelines only, and the standards of the State Code shall apply.
- H. All Solar Panels and equipment shall be surface designed and sited so as to not reflect glare onto other properties, public or private roads, rights-of-way, or aircrafts in flight; and shall not interfere with traffic or create a safety hazard.
- I. Prior to issuance of any permit for a Solar Energy System, the applicant shall submit to the Town Building Department a letter stating that the issuance of said permit shall not and does not create in the property owner, or its successors and assigns in title or, create in the property itself:
 - (1) The right to remain free of shadows and/or obstructions to solar energy caused by development of adjoining or neighboring property or the growth of any trees or vegetation on adjoining or neighboring property; or
 - (2) The right to restrict or prohibit development or the growth of any trees or vegetation on adjoining or neighboring property.
- J. Notwithstanding any other provision contained herein, all Solar Energy Systems must comply with the provisions contained in §235-14.4 of this Chapter regarding Overlay Districts, including, if applicable, receipt of site plan approval.
- §235-50. Small-Scale Solar Energy Systems.

A Small-Scale Solar Energy System is a permitted accessory use and structure in all zoning districts, but shall be subject to the following requirements:

- A. Roof mounted Solar Energy Systems.
 - (1) A roof-mounted Solar Energy System may be mounted on any legal principal or accessory building or structure. It is not subject to site plan review and approval by the Planning Board.
 - (2) A roof-mounted Solar Energy System is permitted to serve only the building(s) or structure(s) on the lot upon which the system is located.

- (3) The applicant shall file, with the Town Building Department, a New York State Unified Solar Permit (USP) application and pay all fees in order to obtain a building permit.
- (4) When feasible, as determined by the Town Code Enforcement Officer, Solar Panels facing the front yard must be mounted at the same angle as the roof's surface, with a maximum distance of 18 inches between the roof and the highest edge of the panels.
- (5) Roof-mounted Solar Collectors shall not be subject to height limitations governing principal or accessory buildings or structures to which it is mounted, if, in the opinion of the Town Code Enforcement Officer, after consultation with the Town Engineer, such collectors are installed no more than a height reasonably necessary to accomplish the intended purpose and do not obstruct Solar Access of neighboring properties.
- (6) In buildings or structures with greater than 1,000 square feet of roof area, a suitable perimeter area around the edge of the roof shall be provided.

B. Ground-Mounted Solar Energy System.

- (1) A Ground-Mounted Solar Energy System is permitted to serve only the building(s) or structure(s) on the lot upon which the system is located or on an adjoining vacant lot owned by the entity that owns the building(s) or structure(s) being served.
 - Site plan review and approval by the Planning Board, pursuant to §235-55 of this Chapter, is required for all property except a lot containing a one- or two-family dwelling. However, if the Solar Energy System is to be located on a vacant lot which will serve building(s) or structure(s) on an adjoining lot, site plan approval is required regardless of the occupancy of such building(s) or structure(s).
- (2) A Ground-Mounted Solar Energy System shall not be placed in a front yard. The required rear yard and side yard setback for a Ground-Mounted Solar Energy System shall be at least one hundred (100) feet from the property line. Applicants unable to comply with setback requirements may apply to the Zoning Board of Appeals for relief.
- (3) The height of ground-mounted Solar Collectors and mounts shall not exceed 12 feet when oriented at a maximum tilt.
- (4) The Ground-Mounted Solar Energy System and related equipment shall be substantially screened from view from adjoining and neighboring properties and public and private roadways through the use of architectural features, earth berms, landscaping or other screening which will harmonize with the character of the property and surrounding area. If landscape screening is proposed, a landscape design, signed and stamped by a licensed landscape architect shall be submitted with

- all solar system site plan applications. Such screening shall be designed and installed so as not to substantially interfere with normal operation of the Solar Collectors.
- (5) Ground-Mounted Solar Energy System equipment shall not be sited within any required buffer area.
- (6) Lot coverage limitations.
 - a. The total surface area of all Solar Collectors on a lot shall not exceed the area of the ground covered by the building structure of the largest building on the lot measured from the exterior walls, excluding patios, decks, balconies, screened and open porches and attached garages.
 - b. The area beneath all Solar Collectors shall be included in calculating maximum permitted lot coverage limitations.
- (7) If the Solar Collectors are mounted above an existing impervious surface, they shall not be calculated as part of the lot surface coverage limitations for the applicable zoning district.
- (8) The area beneath Solar Collectors shall not be used for storage of any equipment or material.
- (9) The installation of a Ground-Mounted Solar Energy System shall be considered a land development activity for purposes of stormwater management pursuant to Town Code Chapter 201 of the Town of Blooming Grove.
- (10) The applicant, property owner, system owner and system operator must agree, in writing satisfactory to the Town Attorney, to remove the solar energy system and all associated equipment and structures, if the solar energy system ceases to be used for its intended purpose for twelve consecutive months. Removal of such unused system, equipment and structures shall be completed within six months thereafter.
- §235-51. Large-Scale Solar Energy Systems.

A Large-Scale Solar Energy System is a conditional use in all zoning districts, subject to site plan review and approval by the Planning Board, and subject to the requirements contained in Town Code §235-45.7.

- Section 2. Article IX entitled "Conditional and Special Permit Uses," of Chapter 235, entitled "Zoning," of the Code of the Town of Blooming Grove shall be and hereby is amended to add the following new Section 235-45.7, entitled "Large-Scale Solar Energy Systems" to read as follows:
- §235-45.7. Large-Scale Solar Energy Systems.

- A. A Large-Scale Solar Energy System is a permitted conditional use and structure in all zoning districts, subject to site plan approval by the Planning Board, and subject to the following requirements:
 - (1) Any Large-Scale Solar Energy System shall be set back at least 200 feet from any public or private road, and from all lot lines. Applicants unable to comply with setback requirements may apply to the Zoning Board of Appeals for relief.
 - (2) The average height of any Solar Panel or array shall not exceed 20 feet when oriented at a maximum tilt.
 - (3) The Solar Energy System and related equipment shall be substantially screened from view from adjoining and neighboring properties and from public and private roadways. Appropriate screening shall be provided to the satisfaction of the Planning Board. If landscape screening is proposed, a landscape design, signed and stamped by a licensed landscape architect shall be submitted with all solar system site plan applications. The applicant shall provide a visual analysis to the Planning Board using line-of-sight profiles and color photographs from public viewing locations to be determined by the Planning Board.
 - (4) All on-site power lines shall be installed underground unless the applicant demonstrates to the satisfaction of the Planning Board that such underground installation is not practicable given the particular characteristics of the site.
 - (5) Buildings and structures associated with the Solar Energy System shall, to the extent reasonably possible, use materials, colors, and textures that blend the facility into the existing environment.
 - (6) Access to the site shall provide appropriate and safe sight distance and lawful and appropriate access for emergency vehicles and equipment. Access to the facility shall be reviewed for its sufficiency by the relevant emergency service provider(s). Access to the site shall be constructed with pervious materials except as required by the Town driveway specifications.
 - (7) The site shall include prominent and clear identification of the property address and of the address and phone number of the owner and operator in the case of emergency.
 - (8) The area beneath the collectors shall not be used for storage of any equipment or material.
 - (9) The installation of a Large-Scale Solar Energy System shall be considered a land development activity for purposes of stormwater management pursuant to Town Code Chapter 201 of the Town of Blooming Grove.
- B. Application requirements. In addition to the other requirements in this zoning code applicable to site plan and conditional use applications, as part of its application, the applicant shall submit to the Planning Board the following:

- (1) If the property of the proposed Solar Energy System is to be leased, the written legal consent of all affected parties, specifying the use(s) of the property, and the duration of the project, including easements and other agreements.
- (2) Equipment specification sheets for all photovoltaic panels, significant components, mounting systems and invertors.
- (3) A property operation and maintenance plan, which plan shall describe continuing equipment maintenance and property upkeep, such as but not limited to mowing and trimming. Any use of herbicides shall be restricted to those approved and regulated by the New York State Department of Environmental Conservation (DEC) and shall be applied in accordance with applicable DEC regulations.
- (4) Ten days prior to the application of any herbicide, the system operator shall provide written notification to the Town Code Enforcement Officer (CEO) specifying the type and amount of herbicide to be used and the date, time and location of the proposed application and shall provide such other information as deemed necessary by the CEO. The written notification shall be presented in the form of a notarized affidavit signed by the system operator attesting to the truth of the information provided therein.
- (5) A decommissioning and removal plan as described in paragraph C. below

C. Decommissioning and Removal.

- (1) Removal of unused systems. The applicant, property owner, system owner and system operator shall enter into an agreement binding unto themselves and their successors and assigns in a form satisfactory to the Town Attorney, to remove the Solar Energy System and all associated equipment and structure when the Solar Energy System ceases to be used for its intended purpose for twelve consecutive months. Removal of such unused system, equipment and structures shall be completed within six months thereafter. Said agreement shall be recorded in the chain of title and shall be a condition of the conditional use permit authorized by the Planning Board.
- (2) Decommissioning and removal plan. To ensure the proper removal of a Solar Energy System, a decommissioning plan shall be submitted as part of the application. Compliance with the approved decommissioning plan shall be a condition of the conditional use permit authorized by the Planning Board. The decommissioning plan shall specify that after the Solar Energy System ceases operation, as described in Subparagraph (1) above, the system shall be removed by the applicant, property owner, system owner and system operator as the case may be. The plan shall demonstrate how the removal of the solar energy system and all related equipment and structures shall be conducted and how the remediation of soil and vegetation shall be conducted to return the property to substantially its condition prior to construction.

A cost estimate detailing the projected cost of executing the decommissioning plan shall be prepared by a professional engineer. Cost estimates shall take inflation into account. The decommissioning plan shall state the time period within which the Solar Energy System shall be removed and the property restored, which time period shall be no greater than six (6) months after the solar energy system ceases, for twelve (12) consecutive months, to be used for its intended purpose. A six (6) month extension may be granted by the Town Code Enforcement Officer upon good cause shown.

- (3) Decommissioning and Removal Security.
 - (a) The applicant shall execute and file with the Town Clerk security in a form acceptable to the Town Attorney and Town Board, and in an amount sufficient to pay for the costs and expenses of removal of the Solar Energy System and related equipment and structures and restoration of the site. The amount is subject to approval by the Planning Board's professional engineer and the Planning Board. The security may be in the form of cash, letter of credit or another instrument acceptable to the Town Attorney and the Town Board, or a combination thereof. The security shall remain in full force and effect until all Solar Energy System equipment, structures, and materials have been properly removed and site restoration is complete.
 - (b) The amount of the security shall be sufficient, during the first five (5) years of operation, to cover at least: the projected costs to deconstruct and dispose of all equipment, structures and materials related to the solar energy system; projected costs to restore the site; and all projected fees, costs and expenses estimated to be incurred by the Town to administer and enforce the decommissioning process. Such amount shall be re-evaluated every five (5) years thereafter and, if necessary, adjusted to reflect prevailing costs and expenses as a condition to continued operation of the system.
 - (c) If the amount of the security does not fully cover such fees, costs and expenses ("costs") or if the Town cannot reasonably recover adequate proceeds of the security, then the owner and operator of the Solar Energy System and the property owner shall be jointly and severally, and corporately and personally, liable for the costs not recovered. In addition, the Town may assess such costs against the property, which assessment shall constitute a lien on the property, and which amount may be collected in the same manner as real property taxes.
 - (d) Equipment and parts maintenance. All equipment, parts and items of any kind appurtenant to the maintenance or operation of the solar energy system shall be contained in a secure building. Damaged or unused equipment and parts shall be removed from the premises within 30 calendar days.
 - (e) Ownership changes. If the owner or operator of the solar energy system changes or if the owner of the property changes, the conditional use permit shall remain in

effect, and all requirements of the Town Code and all conditions and requirements of the conditional use permit shall be binding upon each succeeding owner and operator. However, a change in owner or operator shall not affect the decommissioning security, although a new owner may substitute other security in accordance with §235-45.7. A new owner or operator of the Solar Energy System shall immediately notify the Town Code Enforcement Officer of such change in ownership or operator as a condition of continued operation of the Solar Energy System.

- (f) Modifications. Any and all modifications, additions or deletions to the Solar Energy System, whether structural or not, shall be subject to prior site plan review and approval by the Planning Board, except that routine repairs and maintenance, as determined by the Town Code Enforcement Officer, shall not be subject to Planning Board review.
- Section 3. Section 235-55, entitled "Site development plan process," of Chapter 235, entitled "Zoning," of the Code of the Town of Blooming Grove shall be and hereby is amended to add a new subsection 235-55(B)(7), entitled "Solar Access," to read as follows:
 - (7) Solar Access. To the extent reasonably possible, buildings and new structures depicted on a site plan shall be located to take advantage of Solar Access, including orientation of proposed buildings with respect to sun angles, the shading and wind-screen potentials of existing and proposed vegetation on and off site, and the resulting impact to the Solar Access of adjacent uses and property.
- Section 4. Subsection 235-55(C), entitled "Site plan contents," of the Code of the Town of Blooming Grove shall be and hereby is revised as follows:

Paragraph (m) is deleted in its entirety and replaced with a new paragraph (m) to read as follows:

(m) Landscape plan prepared by a licensed landscape architect showing the location and proposed development of landscaping, screening and buffer areas;

Paragraph (q) is re-designated as paragraph (r) and a new paragraph (q) is added to read as follows:

- (q) Description and analysis of the site's Solar Access to help ensure the provision of adequate sunlight to proposed solar facilities.
- Section 5. Section 210-4, entitled "Definitions," of Chapter 210, entitled "Subdivision of Land," of the Code of the Town of Blooming Grove shall be and hereby is amended to add the following definitions:

SOLAR ACCESS - Space open to the sun and clear of overhangs or shade including the orientation of streets and lots to the sun so as to permit the use of active and/or passive Solar Energy Systems on individual properties.

SOLAR EASEMENT - An easement recorded pursuant to New York Real Property Law, subsection 235-b, the purpose of which is to secure the right to receive sunlight across real property of another for continued access to sunlight necessary to operate a Solar Collector.

- Section 6. Section 210-6(B), entitled "Major subdivision," of Chapter 210, entitled "Subdivision of Land," of the Code of the Town of Blooming Grove shall be and hereby is amended by adding a new paragraph (2)(h)[8] to read as follows:
 - [8] An analysis of the site's Solar Access including an analysis of the proposed street layout and building layout to ensure maximum access to the sun for future provision of Solar Energy Systems with the project shall be provided.
- Section 7. Section 210-11, entitled "Design standards," of Chapter 210, entitled "Subdivision of Land," of the Code of the Town of Blooming Grove shall be and hereby is amended by adding a new paragraph B(5) to read as follows:
 - (6) The development shall be laid out to ensure that buildings have been located and road designs have been planned on an east/west access to encourage building siting with a maximum exposure of roof and wall to the sun, taking into account the slope of the property and the nature and location of existing vegetation as it may affect Solar Access.
- Section 8. Section 210-11, entitled "Design standards," of Chapter 210, entitled "Subdivision of Land," of the Code of the Town of Blooming Grove shall be and hereby is amended by amending paragraph C(6) to read as follows:
 - (7) The placement of units in any residential development shall take into consideration topography, privacy, building height, orientation, drainage, Solar Access and aesthetics.
- Section 9. Section 235-55, entitled "Site development plan process," of Chapter 235 entitled "Zoning," of the Town Code shall be and hereby is amended by adding a new subsection M, entitled "Guidelines for future Solar Access," to read as follows:
- M. Guidelines for future Solar Access.
 - (1) New structures shall be sited to take advantage of Solar Access insofar as practical, including the orientation of proposed buildings with respect to sun angles, the shading and windscreen potential of existing and proposed vegetation on and off the site, and the impact of Solar Access to adjacent uses and properties.

- (2) To permit maximum Solar Access to proposed lots and future buildings, wherever reasonably feasible, consistent with other appropriate design considerations and to the extent practicable, new streets shall be located on an east-west axis to encourage building siting with the maximum exposure of roof and wall area to the sun. The Planning Board shall also consider the slope of the property and the nature and location of existing vegetation insofar as they affect Solar Access.
- (3) The impact of street trees on the Solar Access of the surrounding property shall be minimized to the greatest possible extent when selecting and locating shade trees. Reasonable efforts shall be made to avoid shading probable locations for solar energy collectors.
- (4) When the Planning Board reviews and acts upon applications for subdivision approval or site plan approval, it shall take into consideration whether the proposed construction would block access to sunlight between the hours of 9:00 a.m. and 3:00 p.m. Eastern Standard Time for existing approved solar energy collectors or for solar energy collectors for which a permit has been issued.
- (5) The Planning Board may require subdivisions to be platted so as to preserve or enhance Solar Access for either passive or active systems, consistent with other requirements of the Town Code.
- (6) The plan for development of any site within a cluster subdivision shall be designed and arranged in such a way as to promote Solar Access for all or substantially all dwelling units. Considerations may include the following:
 - (a) To maximize Solar Access, place the higher-density dwelling units on a south-facing slope and lower-density dwelling units sited on a north-facing slope.
 - (b) Subject to the Town's setback requirements, site structures as close to the north lot line as possible to increase yard space to the south for reduced shading of the south face of a structure.
 - (c) Site a tall structure to the north of a short structure.

Section 10. If any clause, sentence, paragraph, section or other part of this local law shall be adjudged by any court of competent jurisdiction to be null, invalid, void or unconstitutional, such judgment shall not affect or impair or invalidate the remainder thereof, and shall be confined in its operation to the clause, sentence, paragraph, section or other part of this law that is directly involved in the controversy in which such judgment was rendered and all other parts of the law shall remain valid and in full effect.

<u>Section 11</u>. This local law shall take effect immediately upon filing with the Secretary of the State.